ABSTRACT

It is an object of the present invention to provide a chemical conversion coating agent which places a less burden on the environment and can apply good chemical conversion treatment to all metals such as iron, zinc and aluminum, and a surface-treated metal obtained using the same.

A chemical conversion coating agent comprising: at least one kind selected from the group consisting of zirconium, titanium and hafnium;

fluorine; and

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a water-soluble resin ,

wherein said water-soluble resin has, in at least a part thereof, a constituent unit expressed by the chemical formula (1):

$$\begin{array}{c} \leftarrow \text{CH}_2 - \text{CH} \rightarrow \\ \text{NH}_2 \end{array} (1)$$

and/or the chemical formula (2):

$$\begin{array}{c}
\left(-\text{CH}_2 - \text{CH} \longrightarrow \right) \\
\text{CH}_2 \\
\text{NH}_2
\end{array}$$